

DERWENT-ACC-NO: 1996-019012

DERWENT-WEEK: 199602

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TITLE: Thrust generating procedure and apparatus for
aircraft
and other transport machines - subjecting fuel
to
additional pyrolysis and freezing products of
combustion
to form working substance

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PRIORITY-DATA: 1993RU-0046334 (October 11, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES MAIN-IPC		
RU 2034996 C1	May 10, 1995	N/A
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APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
RU 2034996C1	N/A	1993RU-0046334
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INT-CL (IPC): F02K003/08

ABSTRACTED-PUB-NO: RU 2034996C

BASIC-ABSTRACT:

A thrust is generated by igniting a fuel with excess oxidant, feeding more fuel into the products of the combustion to obtain a working substance, and converting its internal energy into the thrust.

The fuel is subjected to additional pyrolysis, and the products of combustion are for zone to produce the working substance, and the internal energy of the

latter is converted into the thrust by a periodically repeated detonation process. The delivery of fuel into the products of combustion is carried out until a total value for the excess oxidant coefficient of 0.1-0.9 : 1 is achieved, with the fuel and oxidant ignited with an excess oxidant coefficient of 1 - 4 : 1.

The apparatus consists of a housing (1) with an inner combustion chamber (2) forming an annular channel (7), an intermediate chamber (4), a connecting chamber (10) and a converter in the form of a gas dynamic resonator (11). The outlet of the combustion chamber is connected to the intakes of the intermediate chamber and the annular channel, and the output from the latter is connected to the converter.

ADVANTAGE - Improved thrust characteristics and higher efficiency. Aircraft and other forms of transport. Bul.13/10.5.95

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: THRUST GENERATE PROCEDURE APPARATUS AIRCRAFT TRANSPORT MACHINE

SUBJECT FUEL ADD PYROLYSIS FREEZE PRODUCT COMBUST FORM
WORK
SUBSTANCE

DERWENT-CLASS: Q53

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1996-015853

